

# CAMP SWEYOLAKAN CAMP FIRE (PWS 1280033) SOURCE WATER ASSESSMENT REPORT

---

January 18, 2001



## State of Idaho Department of Environmental Quality

**Disclaimer:** This publication has been developed as part of an informational service for the source water assessments of public water systems in Idaho and is based on data available at the time and the professional judgement of the staff. Although reasonable efforts have been made to present accurate information, no guarantees, including expressed or implied warranties of any kind, are made with respect to this publication by the State of Idaho or any of its agencies, employees, or agents, who also assume no legal responsibility for the accuracy of presentations, comments, or other information in this publication. The assessment is subject to modification if new data is produced.

## Executive Summary

Under the Safe Drinking Water Act Amendments of 1996, all states are required by the U.S. Environmental Protection Agency to assess every source of public drinking water for its relative sensitivity to contaminants regulated by the Act. This assessment is based on a land use inventory of the designated assessment area and sensitivity factors associated with the watershed characteristics.

This report, *Source Water Assessment for Camp Sweyolakan*, describes the public drinking water system, the zone boundary of water contribution, and the associated potential contaminant sources located within the boundary. This assessment, taken into account with local knowledge and concerns, should be used as a planning tool to develop and implement appropriate protection measures for this source. **The results should not be used as an absolute measure of risk and they should not be used to undermine public confidence in the water system.**

The Camp Sweyolakan public drinking water supply comes from an intake in Mica Bay on the west side of Coeur d'Alene Lake. Water is drawn from an unknown depth about 70 feet from shore. Coeur d'Alene Lake is an unprotected source subject to fluctuations in turbidity from seasonal runoff. The lake is vulnerable to contamination from heavily used roads, from intensive recreational use, and from residential, agricultural, timber, mining and other industrial sites on along the lakeshore and in the watershed.

This assessment should be used as a basis for determining appropriate new protection measures or re-evaluating existing protection efforts. No matter what ranking a source receives, protection is always important. Whether the source is currently located in a “pristine” area or an area with numerous industrial and/or agricultural land uses, the way to ensure good water quality in the future is to act now to protect valuable water supply resources.

For Camp Sweyolakan, source water protection efforts should focus first on protecting the intake from potential contaminants from the camp fuel storage tank and septic holding tank. Cooperative activities with other public water systems, private and public agencies involved in water quality programs encompassing the entire Coeur d'Alene-St Joe Basin are also important. Due to the fairly short time associated with the movement of surface waters, source water protection activities should be aimed at short-term management strategies with the development of long-term management strategies to counter any future contamination threats.

A community with a fully developed source water protection program will incorporate many strategies. For assistance in developing protection strategies please contact your regional IDEQ office or the Idaho Rural Water Association.

# SOURCE WATER ASSESSMENT FOR CAMP SWEYOLAKAN

## Section 1. Introduction - Basis for Assessment

The following sections contain information necessary to understand how and why this assessment was conducted.

**It is important to review this information to understand what the ranking of this source means.** A map showing the delineated source water assessment area, a map showing the entire watershed contributing to the delineated area and the inventory of significant potential sources of contamination identified within the delineated area are included. The worksheet used to develop the assessment also is attached.

### Background

Under the Safe Drinking Water Act Amendments of 1996, all states are required by the U.S. Environmental Protection Agency (EPA) to assess every source of public drinking water for its relative susceptibility to contaminants regulated by the Safe Drinking Water Act. This assessment is based on a land use inventory of the delineated assessment area and sensitivity factors associated with the intakes and watershed characteristics.

### Level of Accuracy and Purpose of the Assessment

Since there are over 2,900 public water sources in Idaho, time and resources to accomplish the assessments are limited. All assessments must be completed by May of 2003. An in-depth, site-specific investigation of each significant potential source of contamination is not possible. **Therefore, this assessment should be used as a planning tool, taken into account with local knowledge and concerns, to develop and implement appropriate protection measures for this source. The results should not be used as an absolute measure of risk and they should not be used to undermine public confidence in the water system.**

The ultimate goal of the assessment is to provide data to local communities to develop a protection strategy for their drinking water supply. The Idaho Department of Environmental Quality (IDEQ) recognizes that pollution prevention activities generally require less time and money to implement than treatment of a public water supply system once it has been contaminated. IDEQ encourages communities to balance resource protection with economic growth and development. The decision as to the amount and types of information necessary to develop a source water protection program should be determined by the local community based on its own needs and limitations. Source water protection is one facet of a comprehensive growth plan, and it can complement ongoing local planning efforts.

[illegible]

## Coeur d'Alene Basin

## **Section 2. Conducting the Assessment**

### **General Description of the Source Water Quality**

The Camp Sweyolakan water system serves a community of about 75 staff members and campers every year from May through September. The camp is located on the southeast shores of Mica Bay (Figure 1). Camp Sweyolakan drinking water comes from an intake in Mica Bay on Coeur d'Alene Lake. The intake is about 70 feet from shore at an unknown depth.

Historically, the primary water quality issue facing Camp Sweyolakan is that of contaminants from communities, agriculture, mining and other industries in the Coeur d'Alene-St. Joe Basin entering the lake during periods of high runoff. Another concern is nutrient loading from septic systems serving the houses lining the lakeshore.

From July 1994 to June 1997 Camp Sweyolakan participated in a voluntary study monitoring lead and cadmium levels in the waters of Coeur d'Alene Lake. The cadmium concentration was less than 0.5 micrograms per liter in 2 of the 3 raw water samples analyzed during the study. It tested at 0.6 micrograms per liter in July 1994. The Maximum contaminant Level (MCL) for cadmium is 5.00 micrograms per liter. The lead concentration varied from less than 5 micrograms per liter to a high of 7 micrograms per liter, recorded in May 1997. The action level for lead is 15 micrograms per liter.

Nitrate (MCL 10 mg/l) was detected in Camp Sweyolakan water in 1990, 1997, 1998, 1999 and 2000. The concentrations were 0.025 mg/l, 0.087 mg/l, 0.0100 mg/l, 0.181 mg/l and 0.026 mg/l respectively. Runoff from fertilizer use and leaching from septic tanks are possible sources of nitrate.

### **Defining the Zones of Contribution--Delineation**

To protect surface water systems from potential contaminants, the EPA required that the entire drainage basin be delineated upstream from the intake to the hydrologic boundary of the drainage basin (U.S. EPA, 1997b). The EPA recognized that an intake on a large water body could have an extensive drainage basin. Therefore, the EPA recommended that large drainage basins be segmented into smaller areas for the purpose of implementing a cost-effective potential contaminant inventory and susceptibility analysis. The delineation process established the physical area around an intake that became the focal point of the assessment. For Camp Sweyolakan a lake buffer zone extending 500 feet from the shoreline around the circumference of the lake was mapped. In addition to the buffer zone around the lake itself, creeks and rivers discharging into the lake were delineated. This stream buffer zone extends from the lake up the rivers or streams and their tributaries to a distance of 25-miles from the intake, or to the 4-hour streamflow time-of-travel boundary, whichever is greater (Figure 2). The entire water surface area of the lake along with the 500' buffer around the lake is also the 24-hour emergency response delineation for Camp Sweyolakan.

A map of the entire watershed, showing locations of highways and any Superfund sites (CERCLIS), Toxic Release Inventory sites or National Pollutant Discharge Elimination System (NPDES) facilities which could pose a threat to the lake, is also included (Figure 2). The presence of these sites in the watershed was factored into the susceptibility analysis for the Camp Sweyolakan intake. The data used by IDEQ in determining the source water assessment delineation are available upon request.

## Identifying Potential Sources of Contamination

A potential source of contamination is defined as any facility or activity that stores, uses, or produces, as a product or by-product, the contaminants regulated under the Safe Drinking Water Act and has a sufficient likelihood of releasing such contaminants at levels that could pose a concern relative to drinking water sources. The goal of the inventory process is to locate and describe those facilities, land uses, and environmental conditions that are potential sources of surface water contamination. The locations of potential sources of contamination within the delineation areas were obtained by field surveys conducted by IDEQ and from available databases.

The watershed for Coeur d'Alene Lake covers parts of Shoshone, Benewah, Kootenai, Bonner, Latah and Clearwater Counties in north Idaho. It encompasses a number of small towns where mining and logging are the primary economic activities. The vast majority of the land in the basin is publicly owned. Most of the agricultural land in the basin is located south and west of the lake. Land in the buffer zone around the lake is mostly privately owned and has been heavily developed for year-round and summer homes. The lake itself gets intensive recreational use.

It is important to understand that a release may never occur from a potential source of contamination provided they are using best management practices. Many potential sources of contamination are regulated at the federal level, state level, or both to reduce the risk of release. Therefore, when a business, facility, or property is identified as a potential contaminant source, this should not be interpreted to mean that this business, facility, or property is in violation of any local, state, or federal environmental law or regulation. What it does mean is that the potential for contamination exists due to the nature of the business, industry, or operation. There are a number of methods that water systems can use to work cooperatively with potential sources of contamination. These involve educational visits and inspections of stored materials. Many owners of such facilities may not even be aware that they are located near a public water supply intake.

## Contaminant Source Inventory Process

A contaminant inventory of the study area was conducted by IDEQ. It involved identifying and documenting potential contaminant sources within the Camp Sweyolakan Source Water Assessment Area through the use of computer databases and Geographic Information System (GIS) maps developed by IDEQ. Bob Crawford reviewed the maps for Camp Sweyolakan. Changes he suggested along with potential contaminants inventoried by water system operators whose assessment areas overlap the Camp Sweyolakan assessment area are included in the analysis.

A total 100 potential contaminant sources are located within the lake and stream buffer zones. 51 major sites are located in the watershed but outside of the buffer zone (see Table 1). There are duplicates in some instances because a site was documented on more than one database. Most of the potential contaminant sources within the delineated source water areas are clustered in and around Coeur d'Alene. Because of the direction of water flow in the lake it is unlikely that a contaminant release at Coeur d'Alene would affect water quality at Camp Sweyolakan. Potential contaminant sources located in the buffer zone around the lake and tributary streams include septic tanks, petroleum storage tanks, waste water land application sites, a landfill, roads, mines and a number of small business where contaminants of concern may be used (Figure 2). Table 1 lists the potential contaminants of concern and the information source.

**Table 1. Camp Sweyolakan. Potential Contaminant Inventory**

Buffer Zone Map ID	Description	Potential Contaminant	Source of Information
1	PARK- CLOSED FUEL TANK	SOC, VOC	LUST Database
2	PARK- CLOSED FUEL TANK	SOC, VOC	LUST Database
3	PARK- CLOSED FUEL TANK	SOC, VOC	LUST Database
4	RESORT- CLOSED FUEL TANK	SOC, VOC	LUST Database
5	CLOSED FUEL TANK	SOC, VOC	LUST Database
6	MAINTENANCE SHOP-CLOSED FUEL TANK	SOC, VOC	LUST Database
7	RESORT- CLOSED FUEL TANK	SOC, VOC	LUST Database
8	CLOSED FUEL TANK ROSE CAFE	SOC, VOC	LUST Database
9	RESORT- CLOSED FUEL TANK	SOC, VOC	LUST Database
10	CLOSED FUEL TANK	SOC, VOC	LUST Database
11	CLOSED FUEL TANK	SOC, VOC	LUST Database
12	CLOSED FUEL TANK	SOC, VOC	LUST Database
13	CLOSED FUEL TANK	SOC, VOC	UST Database
14	RESORT-CLOSED FUEL TANK	SOC, VOC	UST Database
15	CLOSED FUEL TANK	SOC, VOC	UST Database
16	RESORT-FUEL TANK	SOC, VOC	UST Database
17	FUEL TANK	SOC, VOC	UST Database
18	FUEL TANK	SOC, VOC	UST Database
19	CLOSED FUEL TANK	SOC, VOC	UST Database
20	RESORTS-CLOSED FUEL TANK	SOC, VOC	UST Database
21	SHOP CLOSED FUEL TANK	SOC, VOC	UST Database
22	SEAPLANE SERVICE-FUEL TANK	SOC, VOC	UST Database
23	RESORT-FUEL TANK	SOC, VOC	UST Database
24	CLOSED FUEL TANK	SOC, VOC	UST Database
25	MARINA-FUEL TANK	SOC, VOC	UST Database
26	GAS STATION	SOC, VOC	UST Database
27	RESORT-FUEL TANK	SOC, VOC	UST Database
28	GAS STATION	SOC, VOC	UST Database
29	FIRE STATION-CLOSED FUEL TANK	SOC, VOC	UST Database
30	CLOSED FUEL TANK	SOC, VOC	UST Database
31	MARINA	SOC, VOC	Business Mailing List
32	CAR RENTAL	SOC, VOC	Business Mailing List
33	EXCAVATING CONTRACTOR	SOC, VOC	Business Mailing List
34	CAMP GROUND	microbial	Business Mailing List
35	GENERAL CONTRACTOR	SOC, VOC	Business Mailing List
36	MARINE CONTRACTOR	SOC, VOC	Business Mailing List
37	MINING COMPANY	IOC	Business Mailing List
38	PHOTOGRAPHER	IOC	Business Mailing List
39	RV PARK & Marina	SOC, VOC	Business Mailing List
40	BOAT DEALER	SOC, VOC	Business Mailing List
41	INDUSTRIAL SITE	SOC, VOC	NPDES Database

Buffer Zone Map ID	Description	Potential Contaminant	Source of Information
42	WASTEWATER PLANT	MICROBIAL	NPDES Database
43	WASTEWATER PLANT	MICROBIAL	NPDES Database
44	CITY SHOP	SOC, VOC	RICRIS Database
45	PROSPECT	IOC	Mine Database
46	GRAVEL PIT	SEDIMENT	Mine Database
47	MINE	IOC	Mine Database
48	CLAY OCCURRENCE	SEDIMENT	Mine Database
49	PEAT OCCURRENCE	IOC, SOC, VOC	Mine Database
50	CLAY OCCURRENCE	SEDIMENT	Mine Database
51	MARINA	SOC, VOC	SARA Database
52	OIL COMPANY	SOC, VOC	SARA Database
53	OIL COMPANY	SOC, VOC	AST Database
54	WASTEWATER LAND APPLICATION	MICROBIAL	WLAP Database
55	WASTEWATER LAND APPLICATION	MICROBIAL	WLAP Database
56	WASTEWATER LAND APPLICATION	MICROBIAL	WLAP Database
57	WASTEWATER LAND APPLICATION	MICROBIAL	WLAP Database
58	LANDFILL	IOC, SOC, VOC, MICROBIAL	Landfill Database
59	TRANSPORTATION CORRIDOR	IOC, SOC,VOC, SEDIMENT	Enhanced Inventory
60	DRAINFIELD	MICROBIAL	Enhanced Inventory
61	DRAINFIELD	MICROBIAL	Enhanced Inventory
62	DRAINFIELD	MICROBIAL	Enhanced Inventory
63	DRAINFIELD	MICROBIAL	Enhanced Inventory
64	DRAINFIELD	MICROBIAL	Enhanced Inventory
65	SMALL HISTORICAL LANDFILL	IOC, SOC, VOC, MICROBIAL	Enhanced Inventory
66	FILTERED DRAINFIELD AND HOLDING TANKS	MICROBIAL	Enhanced Inventory
67	SURFACE WATER	MICROBIAL	Enhanced Inventory
68	BOAT DOCKS	SOC, VOC	Enhanced Inventory
69	ROADS	IOC, SOC,VOC,SEDIMENT	Enhanced Inventory
70	DRYLAND AGRICULTURE	IOC, SOC, SEDIMENT	Enhanced Inventory
71	ROADS	SOC, VOC,SEDIMENT	Enhanced Inventory
72	SEPTIC TANK	MICROBIAL	Enhanced Inventory
73	SEPTIC TANK	MICROBIAL	Enhanced Inventory
74	SEPTIC DRAINFIELD	MICROBIAL	Enhanced Inventory
75	STORAGE GARAGE AND WORKSHOP	SOC, VOC	Enhanced Inventory
76	ABOVE GROUND FUEL STORAGE	SOC, VOC	Enhanced Inventory
77	FIELD DRAINAGE	SEDIMENT	Enhanced Inventory
78	SEPTIC TANK	MICROBIAL	Enhanced Inventory



Buffer Zone Map ID	Description	Potential Contaminant	Source of Information
79	SEPTIC TANK	MICROBIAL	Enhanced Inventory
80	SEPTIC TANK	MICROBIAL	Enhanced Inventory
81	SEPTIC TANK	MICROBIAL	Enhanced Inventory
82	SEPTIC TANK	MICROBIAL	Enhanced Inventory
83	SEPTIC TANK	MICROBIAL	Enhanced Inventory
84	HISTORICAL SEPTIC TANKS	MICROBIAL	Enhanced Inventory
85	BOAT SERVICE REPAIR STORAGE DOCKS	SOC, VOC	Enhanced Inventory
86	BOAT SERVICE REPAIR STORAGE DOCKS	SOC, VOC	Enhanced Inventory
87	HISTORICAL LANDFILL	IOC, SOC, VOC, MICROBIAL, SILT	Enhanced Inventory
88	FUEL STORAGE TANK	FUEL STORAGE	Enhanced Inventory
89	SEPTIC TANK	MICROBIAL	Enhanced Inventory
90	DRAINFIELD	MICROBIAL	Enhanced Inventory
91	PRIVATE SEWER SYSTEM	MICROBIAL	Enhanced Inventory
92	SEPTIC TANK AND DRAINFIELD	MICROBIAL	Enhanced Inventory
93	SEPTIC TANK AND DRAINFIELD	MICROBIAL	Enhanced Inventory
94	SEPTIC TANK	MICROBIAL	Enhanced Inventory
95	HOLDING TANK AND SEPTIC TANK	MICROBIAL	Enhanced Inventory
96	HOLDING TANK	MICROBIAL	Enhanced Inventory
97	CITY SHOP	SOC, VOC	Enhanced Inventory
98	FACTORY	SOC, VOC	Enhanced Inventory
99	SEPTIC HOLDING TANK	MICROBIAL	Enhanced Inventory
100	FUEL STORAGE TANK	SOC, VOC	Enhanced Inventory

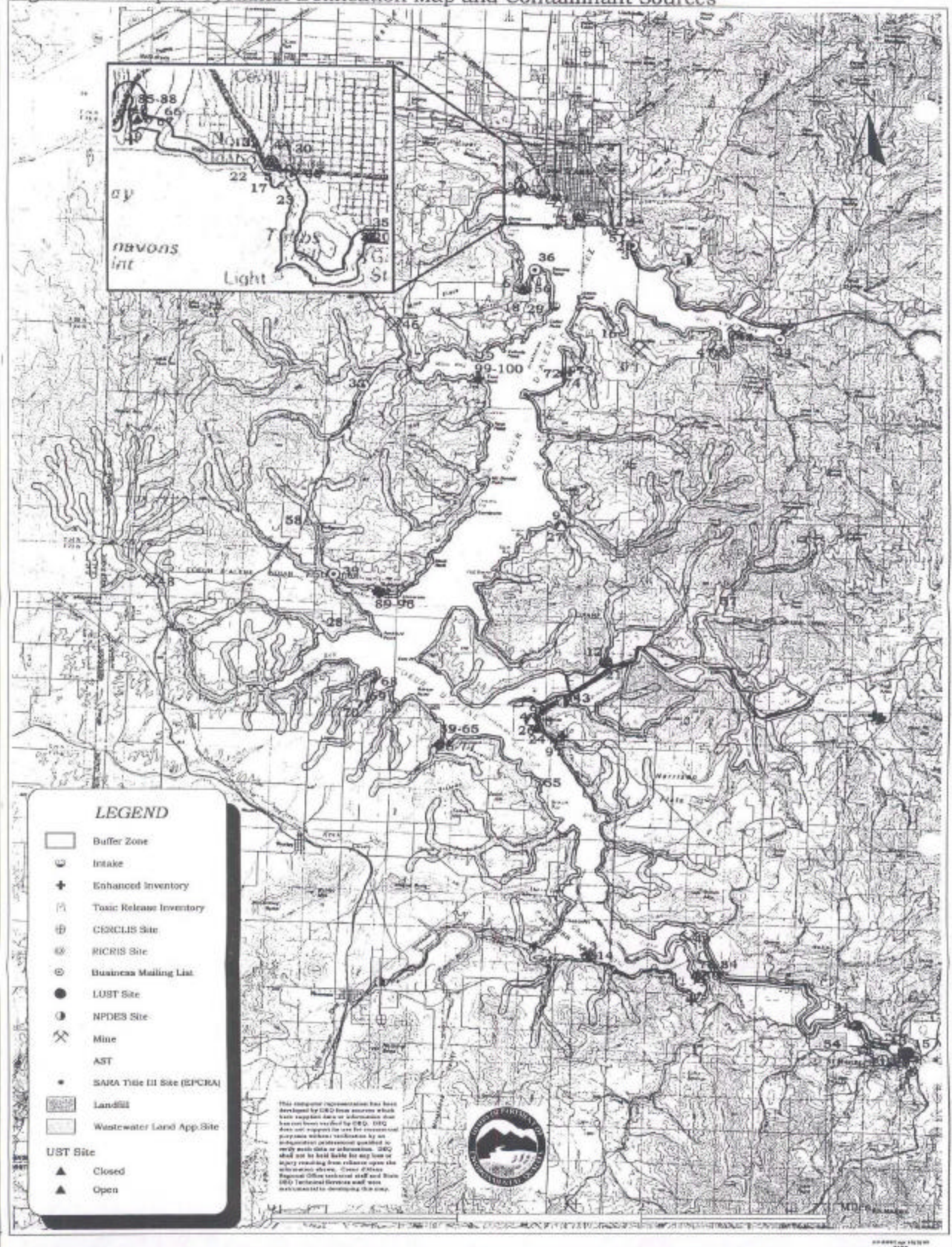
Basin Map ID	Description	Potential Contaminant	Source of Information
N-1	H2O TREATMENT	SUSPENDED SOLIDS	NPDES Database
N-2	H2O TREATMENT	MICROBIAL	NPDES Database
N-3	H2O TREATMENT	MICROBIAL	NPDES Database
N-4	MINE	IOC	NPDES Database
N-5	WATER FILTER	SUSPENDED SOLIDS	NPDES Database
N-6	WATER FILTER	SUSPENDED SOLIDS	NPDES Database
N-7	MINE	IOC	NPDES Database
N-8	MINE	IOC	NPDES Database
N-9	MINE	IOC	NPDES Database
N-10	H2O TREATMENT	MICROBIAL	NPDES Database
N-11	MINE	IOC	NPDES Database
N-12	MINE	IOC	NPDES Database
N-13	MINE	IOC	NPDES Database
N-14	MINE	IOC	NPDES Database

**Table 1. Camp Sweyolakan. Potential Contaminant Inventory**

<b>Basin Map ID</b>	<b>Description</b>	<b>Potential Contaminant</b>	<b>Source of Information</b>
N-15	MINE	IOC	NPDES Database
N-16	H2O TREATMENT	MICROBIAL	NPDES Database
N-17	MINE	IOC	NPDES Database
N-18	MUNICIPAL	MICROBIAL	NPDES Database
N-19	INDUSTRIAL	VOC	NPDES Database
N-20	MUNICIPAL	MICROBIAL	NPDES Database
N-21	MUNICIPAL	MICROBIAL	NPDES Database
N-22	MUNICIPAL	MICROBIAL	NPDES Database
N-23	MUNICIPAL	MICROBIAL	NPDES Database
1-C	CAMP DUMP	MICROBIAL, SOC, VOC	CERCLA Database
2-C	BRIDGE		CERCLA Database
3-C	PAINT STORE	SOC,VOC	CERCLA Database
4-C	CONCRETE & ASPHALT PLANT	VOC	CERCLA Database
5-C	GROCERY		CERCLA Database
6-C	DRY CLEANER	VOC	CERCLA Database
7-C	AUTO REPAIR, CLOSED	SOC, VOC	CERCLA Database
8-C	ROAD	SOC, SEDIMENT	CERCLA Database
9-C	MOVING COMPANY	VOC	CERCLA Database
10-C	WORK CENTER	MICROBIAL, SOC, VOC,	CERCLA Database
11-C	WOOD TREATMENT	SOC,VOC	CERCLA Database
13-C	MINE	IOC	CERCLA Database
12-C	PHOSPHATE COMPANY	IOC	CERCLA Database
14-C	MINE	IOC	CERCLA Database
15-C	MINE	IOC	CERCLA Database
16-C	TAILINGS	IOC	CERCLA Database
17-C	MILLSITE	IOC	CERCLA Database
18-C	MILLSITE	IOC	CERCLA Database
19-C	TAILINGS	IOC	CERCLA Database
20-C	MILLSITE	IOC	CERCLA Database
21-C	MINE	IOC	CERCLA Database
22-C	MILLSITE	IOC	CERCLA Database
23-C	WOOD TREATMENT	VOC	CERCLA Database
24-C	INDUSTRIAL SITE	VOC	CERCLA Database
25-C	LANDFILL	MICROBIAL, SOC, VOC,	CERCLA Database
26-C	RAILROAD DUMP	SOC,VOC	CERCLA Database
1-T	INDISTRIAL	SOC,VOC	Toxic Release Inventory
2-T	INDISTRIAL	SOC,VOC	Toxic Release Inventory

**IOC = inorganic chemical, VOC = volatile organic chemical, SOC = synthetic organic chemical**

Figure 2. Camp Swevolakan Delineation Map and Contaminant Sources





### Section 3. Susceptibility Analyses

Significant potential sources of contamination were ranked as high, moderate, or low risk according to the following considerations: hydrologic characteristics, physical integrity and construction of the intake, land use characteristic, and potentially significant contaminant sources. The susceptibility rankings are specific to a particular potential contaminant or category of contaminants. Therefore, a high susceptibility rating relative to one potential contaminant does not mean that the water system is at the same risk for all other potential contaminants.

The relative ranking that is derived for each intake is a qualitative, screening-level step that, in many cases, uses generalized assumptions and best professional judgement. The following summaries describe the rationale for the susceptibility ranking.

#### Intake Construction

The construction of the Camp Sweyolakan. water system intake directly affects the raw water quality coming into the filtration plant.. The intake is at an unknown depth about 70 feet from shore. It is about two thirds of a mile from the mouth of an ephemeral creek that drains into Mica Bay. In a Susceptibility Analysis calculated September 25, 2000 by DEQ staff, the intake construction score was 2, moderately susceptible, because the intake is without an infiltration gallery.

#### Potential Contaminant Source and Land Use

The intake ranked in the highly susceptible category for contamination by SOC, VOC and microbial pollutants because of the fuel storage and septic holding tanks within 1000 feet of the intake. The intake scored in the moderately susceptible range for contamination from inorganic chemicals. Table 2 summarizes the Susceptibility Analysis categorizations for the Camp Sweyolakan. intake.

**Table 2. Summary of Camp Sweyolakan Susceptibility Evaluation**

Intake	Contaminant Inventory				System Constructi on	Final Susceptibility Ranking			
	IOC	VOC	SOC	Microbials		IOC	VOC	SOC	Microbials
CdA Lake	M	H*	H*	H*	M	M	H*	H*	H*

H = High Susceptibility, M = Moderate Susceptibility, Low Susceptibility

IOC = inorganic chemical, VOC = volatile organic chemical, SOC = synthetic organic chemical

H\* - Indicates source automatically scored as high susceptibility due to presence of either a VOC, SOC IOC or microbial pollutant above the Maximum Contaminant Level in the finished drinking water or the presence of a significant potential contaminant source within 1000 feet of the intake.

#### **Susceptibility Summary**

The Camp Sweyolakan drinking water system is most threatened by potential contaminants from fuel storage and a septic holding tank near the drinking water intake. Contaminants from communities and industries in the watershed entering the lake during periods of high runoff are a moderate threat to drinking water quality at the camp.

## **Section 4. Options for Source Water Protection**

The susceptibility assessment should be used as a basis for determining appropriate new protection measures or re-evaluating existing protection efforts. No matter what the susceptibility ranking a source receives, protection is always important. Whether the source is currently located in a “pristine” area or an area with numerous industrial and/or agricultural land uses that require education and surveillance, the way to ensure good water quality in the future is to act now to protect valuable water supply resources.

An effective source water protection program is tailored to the particular local source water protection area. A community with a fully developed source water protection program will incorporate many strategies. Reviewing routines for fuel transfer and storage, and for managing septic system maintenance at the camp should be a priority because these potential contaminant sources are so close to the intake. Contingency plans and supplies for dealing with fuel or septic spills at the camp need to in place and camp staff trained in their use. Because the watershed feeding Coeur d'Alene Lake encompasses such a large area, Camp Sweyolakan should participate in programs that address management of the entire basin. Partnerships with federal, state and local agencies, industry and private groups should be established and are critical to success. Due to the relatively short time involved with the movement of surface water, source water protection activities should be aimed at short-term management strategies with an emphasis on dealing with long-term future impacts from these same sources.

## **Assistance**

Public water supplies and others may call the following IDEQ offices with questions about this assessment and to request assistance with developing and implementing a local protection plan. In addition, draft protection plans may be submitted to the IDEQ office for preliminary review and comments.

Coeur d'Alene Regional IDEQ Office (208) 769-1422

State IDEQ Office (208) 373-0502

Website: <http://www.deq.state.id.us>

## References Cited

Idaho Department of Agriculture, 1998. Unpublished Data.

Idaho Division of Environmental Quality, 1994. Ground Water and Soils Reconnaissance of the Lower Payette Area, Payette County, Idaho. Ground Water Quality Technical Report No. 5. Idaho Division of Environmental Quality. December 1994.

EPA (U.S. Environmental Protection Agency), 1997, State Methods for Delineating Source Water Protection Areas for Surface Water Supplied Sources of Drinking Water, EPA 816-R-97-008, 40p.

U.S. Government Printing Office, 1995, Code of Federal Regulations, 40 CFR 112, Appendix C-III, Calculation of the Planning Distance

Idaho Department of Environmental Quality, 1999, *Protecting Drinking Water Sources in Idaho*.

# Attachment A

## Camp Sweyolakan Camp Fire Susceptibility Analysis Worksheet



The final scores for the susceptibility analysis were determined from the addition of the Potential Contaminant Source/Land Use Score and Source Construction Score.

Final Susceptibility Scoring:

0 - 7    Low Susceptibility

8 - 15   Moderate Susceptibility

> 16    High Susceptibility

## Surface Water Susceptibility Report

Public Water System Name :

CAMP SWEYOLAKAN CAMP FIRE

Source: LAKE CD'A

Public Water System Number

1280033

10/19/00 7:09:40 AM

## 1. System Construction

SCORE

Intake structure properly constructed	YES	0
Infiltration gallery or well under the direct influence of Surface Water	NO	2

Total System Construction Score 2

## 2. Potential Contaminant Source / Land Use

IOC  
ScoreVOC  
ScoreSOC  
ScoreMicrobial  
Score

Predominant land use type (land use or cover)	BASALT FLOW, UNDEVELOPED, OTHER	0	0	0	0
Farm chemical use high	NO	0	0	0	
Significant contaminant sources *	YES	MICROBIAL SOC, VOC			
Sources of class II or III contaminants or microbials	present within the small stream segment of	4	4	4	4
Agricultural lands within 500 feet	YES Less than 25% Irrigated Agriculture	0	0	0	0
Three or more contaminant sources	YES	1	1	1	1
Sources of turbidity in the watershed	YES	1	1	1	1

Total Potential Contaminant Source / Land Use Score 10 10 10 10

## 3. Final Susceptibility Source Score

12

12

12

12

## 4. Final Source Ranking

Moderate

Moderate

Moderate

Moderate

\* Special consideration due to significant contaminant sources  
Source is considered High Susceptibility

## POTENTIAL CONTAMINANT INVENTORY

### LIST OF ACRONYMS AND DEFINITIONS

**AST (Aboveground Storage Tanks)** – Sites with aboveground storage tanks.

**Business Mailing List** – This list contains potential contaminant sites identified through a yellow pages database search of standard industry codes (SIC).

**CERCLIS** – This includes sites considered for listing under the **Comprehensive Environmental Response Compensation and Liability Act (CERCLA)**. CERCLA, more commonly known as **Superfund** is designed to clean up hazardous waste sites that are on the national priority list (NPL).

**Cyanide Site** – DEQ permitted and known historical sites/facilities using cyanide.

**Dairy** – Sites included in the primary contaminant source inventory represent those facilities regulated by Idaho State Department of Agriculture (ISDA) and may range from a few head to several thousand head of milking cows.

**Deep Injection Well** – Injection wells regulated under the Idaho Department of Water Resources generally for the disposal of stormwater runoff or agricultural field drainage.

**Enhanced Inventory** – Enhanced inventory locations are potential contaminant source sites added by the water system. These can include new sites not captured during the primary contaminant inventory, or corrected locations for sites not properly located during the primary contaminant inventory. Enhanced inventory sites can also include miscellaneous sites added by the Idaho Department of Environmental Quality (DEQ) during the primary contaminant inventory.

**Floodplain** – This is a coverage of the 100-year floodplains.

**Group 1 Sites** – These are sites that show elevated levels of contaminants and are not within the priority one areas.

**Inorganic Priority Area** – Priority one areas where greater than 25% of the wells/springs show constituents higher than primary standards or other health standards.

**Landfill** – Areas of open and closed municipal and non-municipal landfills.

**LUST (Leaking Underground Storage Tank)** – Potential contaminant source sites associated with leaking underground storage tanks as regulated under RCRA.

**Mines and Quarries** – Mines and quarries permitted through the Idaho Department of Lands.)

**Nitrate Priority Area** – Area where greater than 25% of wells/springs show nitrate values above 5mg/l.

**NPDES (National Pollutant Discharge Elimination System)** – Sites with NPDES permits. The Clean Water Act requires that any discharge of a pollutant to waters of the United States from a point source must be authorized by an NPDES permit.

**Organic Priority Areas** – These are any areas where greater than 25 % of wells/springs show levels greater than 1% of the primary standard or other health standards.

**Recharge Point** – This includes active, proposed, and possible recharge sites on the Snake River Plain.

**RICRIS** – Site regulated under **Resource Conservation Recovery Act (RCRA)**. RCRA is commonly associated with the cradle to grave management approach for generation, storage, and disposal of hazardous wastes.

**SARA Tier II (Superfund Amendments and Reauthorization Act Tier II Facilities)** – These sites store certain types and amounts of hazardous materials and must be identified under the Community Right to Know Act.

**Toxic Release Inventory (TRI)** – The toxic release inventory list was developed as part of the Emergency Planning and Community Right to Know (Community Right to Know) Act passed in 1986. The Community Right to Know Act requires the reporting of any release of a chemical found on the TRI list.

**UST (Underground Storage Tank)** – Potential contaminant source sites associated with underground storage tanks regulated as regulated under RCRA.

**Wastewater Land Applications Sites** – These are areas where the land application of municipal or industrial wastewater is permitted by DEQ.

**Wellheads** – These are drinking water well locations regulated under the Safe Drinking Water Act. They are not treated as potential contaminant sources.

**NOTE:** Many of the potential contaminant sources were located using a geocoding program where mailing addresses are used to locate a facility. Field verification of potential contaminant sources is an important element of an enhanced inventory.

Where possible, a list of potential contaminant sites unable to be located with geocoding will be provided to water systems to determine if the potential contaminant sources are located within the source water assessment area.